# MINUTES SPECIAL MEETING UTILITY SERVICE BOARD APRIL 6, 2005

A Special Meeting of the Utility Service Board of the City of Jasper, Indiana, was held in the Council Chambers of City Hall in Jasper at 4:00 PM on Wednesday, April 6, 2005.

The meeting was called to order by Chairman Greg A. Krodel who presided.

### UPON CALL OF THE ROLL, THE FOLLOWING WERE PRESENT:

Greg A. Krodel – Chairman Mike Harder – Vice Chairman (arrived at 4:17 PM) Ken Sendelweck – Secretary Michael A. Schwenk – Electric Commissioner Jeffrey S. Theising - Water Commissioner Edward J. Kreilein – Wastewater Commissioner Alex Emmons – Gas Commissioner

### **ALSO PRESENT**:

Jerry Schitter – Electric Distribution Manager Windell Toby – Electric Generation Manager Thomas A. Lents – Wastewater Manager Kenneth R. Schultz – Business Manager Sandy Hemmerlein – City Attorney

#### ABSENT:

Michael A. Oeding – Gas & Water Manager

### **PLEDGE OF ALLEGIANCE** (B-26)

Chairman Greg Krodel led the Pledge of Allegiance.

### **POWER PLANT DISCUSSION (B-34)**

Chairman Krodel stated the purpose of the special meeting was to have discussions on the status of the Power Plant repair and to hear a description of the problem from AEP.

Windell Toby introduced Jim Timperley of AEP who came before the Board to give an update on the generator failure inspection and a repair proposal.

Mr. Timperley reminded the Board that AEP was involved in the Power Plant generator repair and rewind in 2000. He summarized the damage and the proposed repairs.

The Jasper Municipal steam turbine generator stator failure was inspected by AEP on March 24, 2005 and tests were performed on March 31 and April 1, 2005 to determine the extent of damage and possible repair options. One of the series connections between the stator coils had opened up and the resulting arc damaged an adjacent connection and burned the surrounding mica insulation. Several neighboring coils appear to also have burn damage.

Several service providers have recommended a complete stator rewind is necessary to return the machine to service. AEP recommended repairs to the damaged areas and those areas that testing has shown may develop future problems, which would be a prudent option to return the generator to service. AEP has successfully implemented similar repairs to large machines like the Jasper generator for several decades.

There is one open connection between the stator coils and the adjoining jumper damage; however, 95% of the apparent coil insulation damage is very superficial. Much of the visible damage consists of carbon bonded to the red surface paint, with no damage to the insulation system. This carbon can be cleaned off and the surface paint reapplied.

The top stator bar #7 had the failed connection and that stator bar will need to be replaced with a spare stator bar. This single bar replacement technique has been used by the utility industry and AEP for several decades to return a large machine to service when damage is limited.

Immediately surrounding the open jumper there was arc damage to several layers of mica insulation. This deterioration was removed and damaged insulation found to not be very deep.

Additional testing to check all other coil-to-coil jumpers for defective connections was accomplished with 375 amps applied to each of the three stator circuits in turn.

Infrared viewing found 12 connections on the collector end and 8 jumpers on the turbine end that indicated deterioration of the coil-to-coil connections. These would be stripped of insulation and rebrazed, then retested. This would return the machine to service with weak coil-to-coil connections repaired.

Since most of the generator stator is in excellent condition and has operated without the need of any maintenance for 4 years, repairs instead of replacement is a viable technical option. This type of limited repair has proven successful when applied to numerous other large motors and generators. Repairs to known damage areas and the additional testing to detect hidden weaknesses would assure the City of Jasper that the generator is suitable for continued service. The time to complete these repairs would be 7-10 days, depending on conditions found after the connection insulation is removed.

Mr. Timperley said they have been in discussions with Monarch Electric about doing the repairs. He said Monarch has been doing this kind of repair work for decades and they are ready to start as soon as insurance requirements are met. He said the generator will be repaired, but there will be no warranty.

Sandy Hemmerlein asked Mr. Timperley if this work will be done at AEP's cost and he responded that was correct.

Mr. Timperley said he sees no physical need to rewind the stator, but all of the electrical testing has not been completed.

The rotor will be taken off-site, either to National Electric Coil or to Monarch Electric, to remove the rings from the end, clean it, and put the rings back on with new insulation. Mr. Timperley stated that AEP would also cover this cost, including transportation and the insurance. The rotor repair should take approximately 2 weeks. Balancing the rotor, which would typically cost \$20,000 - \$30,000, would not be included, but Mr. Timperley didn't expect the balancing to be needed.

Ed Kreilein asked if the failure in 2000 was due to the rewindings not being done correctly. Mr. Timperley agreed with that statement and said the work didn't come up to the standards they would have liked.

Jerry Schitter asked if AEP would be on site during start up. Mr. Timperley indicated they could be

Mr. Timperley reiterated that Monarch could be ready to travel tomorrow.

Sandy Hemmerlein reminded Mr. Timperley that if National Electric Coil does the rotor work they would have to meet the City's insurance requirements. He said he was aware of that and it would not be a problem.

Several Board members expressed their approval of the methodology that would be used to assure the repairs were successful. In addition, Greg Krodel reiterated the price is right and Mr. Timperley agreed we couldn't beat the price.

After some discussion, the Board members agreed to proceed with the repair proposal.

Mike Schwenk made a motion to have AEP proceed with the no charge repair of the generator, and the no charge cleaning of the rotor as presented, pending approval of insurance. Ken Sendelweck seconded the motion. Motion approved, 7-0.

Chairman Krodel thanked Mr. Timperley for his report and AEP's willingness to make it right.

## **TITAN CONTRACTING** (B-559)

Sandy Hemmerlein reminded the Board that the lawsuit with Titan Contracting and Cincinnati Insurance is continuing. Mediation has been scheduled for Thursday, April 14, 2005. In order to expedite any settlement that may be reached, Hemmerlein said it would be appropriate for the Board to grant settlement authority to the group of people that will be attending the mediation. At this time the group consists of Mayor Schmitt, Ed Kreilein, Ken Sendelweck, Tom Lents, Ken Schultz, and Sandy Hemmerlein.

Hemmerlein requested a motion to grant settlement authority on the Cincinnati/Titan lawsuit to the group of people attending the mediation on behalf of the Board and the City. In the event the mediation is not successful, the group would have continuing authority to settle this case until it is actually resolved.

Alex Emmons made a motion to grant settlement auth	•
presented. Jeff Theising seconded the motion. Motion ap	proved, 7-0.
There being no further business to come before the Boar upon motion by Mike Schwenk and second by Ed Kreilein	, ,
Attest:	
Secretary	Chairman